ECZEMA:

ITS NATURE AND TREATMENT;

AND, INCIDENTALLY, THE

INFLUENCE OF CONSTITUTIONAL CONDITIONS ON SKIN DISEASES.

BEING

THE LETTSOMIAN LECTURES FOR THE SESSION 1869-70,

Delivered before the Medical Society of London.

BY

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PREFACE.

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The following observations on the nature and treatment of Eczema, which formed the Lettsomian Course of Lectures delivered before the Medical Society of London in the early part of the present year, were published, in great part, subsequently, in the *Lancet*, but are now printed in a separate form, in obedience to a wish to that effect expressed by many of my professional *confrères*. In choosing Eczema—the commonest disease of the skin—as the subject of my Lectures, *and in deciding as to the particular mode in which I have dealt with it*, I had regard particularly to the example set me by most of my predecessors, who have selected for the Lettsomian course, with eminent success, some topic of immediate interest to the busy practitioner.

A consideration of the mode in which Eczema has been hitherto studied and analyzed by observers exhibits in a forcible way the partial and incomplete manner in which Dermatologists are wont to investigate cutaneous maladies ; thus an opening is afforded me of specially calling attention to this point in relation to "Modern Dermatology," which is the title of an introductory chapter to the following Lectures.

43, Sackville Street, Piccadilly, W.

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INTRODUCTORY CHAPTER.

MODERN DERMATOLOGY.

We have heard of late, and are likely still to hear, much about "Modern Dermatology." Amid the mass of wordiness in which it abounds there is certainly enough to give solid satisfaction to the practitioner. The various Medical Schools have recognized the necessity of affording students larger opportunities of observing and studying skin affections; an increasing number of investigators are just now busily at work, both clinically and pathologically, in this particular branch of medicine in all parts of the world; and one of the most influential corporations has worthily taken Dermatology under its protection, and founded—thanks to the liberality of Mr. Erasmus Wilson, F.R.S., to whose labours in this particular department of medicine I have often acknowledged my indebtedness—a special professoriate for the dispensation of sounder teaching on the subject. As the result of this activity, there is the promise that Dermatology will be placed upon a more distinctly scientific basis, and of our receiving larger and sounder views of the causation, pathology, and treatment of cutaneous mischiefs. I cannot but express a hope that the profession will actively aid in securing this end by resolutely setting its face against those who deal with the subject in any but the most scientific spirit, or who practise Dermatology but with a high regard to the important problems which it

presents for elucidation, and the solution of which must throw great light upon dubious questions in general pathology.

I have always desired to be the student's friend in regard to Dermatology. I would therefore point out that there are one or two most unnecessary obstacles thrown in the way of his attempt to master the subject, whilst there are, as I think, very pernicious methods of observing and describing cutaneous diseases that make this an especial difficulty for him. I have attempted to avoid these faulty methods, and to illustrate their evil influence, in dealing with the subject of Eczema in the following Lectures. I will here merely indicate them in general terms.

First.—The tendency to introduce new names is most puzzling, and the practice of reapplying old terms in novel ways sadly confusing.

Secondly.—A bad practice exists of regarding skin diseases in a piecemeal manner, and not in their entireties. These diseases consist of certain stages, and mere *stages* are often made to take the position of *varieties*. I have specially dealt with this point in the following pages.

Thirdly.—Accidental features are often regarded not only as sufficient to constitute varieties of diseases, but to warrant the use of distinct appellations. For instance, œdema is an accidental feature of many skin mischiefs, in which congestion plays a part, as in eczema, yet its presence gives rise to the foundation of œdematous varieties, as in eczema œdematosum, erysipelas œdematodes, &c, The necessity for closely distinguishing between accidentals and essentials is very well evidenced in the case of so-called "prurigo." The modern view is that all the changes comprehended under the term prurigo are due to pediculi; that every man who has "prurigo" is "lousy," a doctrine editorially sanctioned very recently in the *British Medical Journal*,—utterly untenable, clinically untrue, and, because repulsive, all the more desirable to abandon. The only *characteristic* to which pediculi give rise is a certain wound called a bite

—a flat hæmorrhage speck with its central lesion. Beyond producing this, pediculi merely act as ordinary local irritants; they irritate and give rise to scratching, which induces eruptive phenomena—accidental phenomena these are—of the most varied kind in unhealthy skins; this is the case with local irritants generally. Such is pediculosis, phtheiriasis, or lousiness. But pediculi may be found in connection with an atrophied skin—flabby, inelastic, pigmented, itchy, and the seat of a pruriginous eruption—in old people: this is very common in hospital practice amongst the poor, the ill-fed, and the uncleanly. In these cases the pathognomonic sign of the presence of pediculi is present, but the total disease is a mixed affair; viz., pediculosis *plus* atrophy of the skin and its results. But further, true prurigo, that is, a badly-nourished skin (atrophy), with related perverted innervation and "pruriginous" eruption —the essentials of prurigo—may exist without the vestige of a pediculus, as is usually the case amongst the better and more cleanly classes. "Prurigo" may be accidental to pediculosis, and *vice versâ*.

Fourthly.—Similars as regards naked-eye appearances, are often regarded as identicals. In some cases of lupus the formation of epithelium is only disturbed, not destroyed, so that a scaliness is produced. This has been regarded as psoriasis; hence the term lupus-psoriasis, which signifies an improbable disease; for it supposes that two essentially different processes are at work in the same spot—the formation of a fibro-plastic neoplasm and the hypertrophous growth of the cell-elements of the rete mucosum.

So much for four bad habits of dermatologists. I merely add that we need especially at the present time to remember, in relation to Dermatology, that:—

1. The tendency of modern research is to show that many cutaneous diseases, supposed to be dependent upon "morbid conditions of the blood," originate in the skin itself, in disorders of its cell- or its nerve-elements.

2. Blood alterations are nevertheless very closely connected with cutaneous diseases. A distinction is to be

made, however, between the origination of a skin disease in a blood change, and its modification by morbid states of the blood—a fact of the commonest occurrence.

3. There is reason to believe that a soothing plan of treatment is much more commonly needed than a stimulant one (though the reverse is adopted as a rule); since many disorders of the skin are consequent upon nerve-irritation.

Finally, I would say that it is more than ever apparent that no man can hope to be a successful dermatologist who does not aim to be also the thorough physician; and I trust this will be evident from what I have said in the following pages in reference to the pathology and therapeutics of eczema.

LECTURE I.

Eczema a Standard of Comparison for other Diseases—Willan's Labours; his View of Eczema the correct one; Misinterpretation of his Work by Moderns—Doctrines of Hebra, Wilson, and others compared with Willan's—Distinction to be made between Stages and Varieties—What Eczema is, and what its true Clinical Varieties are.

MR. PRESIDENT AND GENTLEMEN,—True to my colours, I have selected the subject-matter of my lectures from the field of Dermatology. Desiring to be thoroughly practical, and remembering that the greatest difficulties and doubts cluster about the commonest matters in cutaneous medicine, I bethought me that it would be doing some real service to dermatology to attempt to clear away a few of the errors that obtain in regard to the most frequent of all diseases of the skin—one met with by the majority of practitioners in their practice daily—namely, eczema; and, moreover, to give an interpretation of its phenomena that may conduce to its more satisfactory treatment. But there is a special reason for the choice made. With pretty general consent, writers on cutaneous medicine lay stress upon a due comprehension of the characters and course of eczema as the best starting-point whence to set out in the study of diseases of the skin as a whole; and they agree in looking upon eczema as the standard of comparison as regards pathological phenomena for all cutaneous diseases. Unphilosophical this arrangement undoubtedly is; but so completely has it been sanctioned by authority, that learners and workers in dermatology cannot but accept it

for the time, since it is doubtful if we shall make much satisfactory advance until we have obtained or given some clearer insight into this accepted standard of reference. Another reason will certainly commend itself in an emphatic and peculiar manner to this Society. I desire to defend the clinical doctrines of one who did, and does in that of his that survives him, great honour to the Medical Society of London;* but who, in the work he did, and the spirit in which he did it, is too much forgotten by the members of it, and, moreover, is often misunderstood and oftener misinterpreted by his successors: I refer to Willan. The occasion which presents itself to me for the purpose is a fitting one as regards the Society itself, and a happy one in relation to the peculiar stage to which dermatological science has advanced. For some years the Willanean system in principle has been vigorously attacked, especially by foreign writers; whilst none of our countrymen have been found defending it. The assault upon it has been chiefly directed, in the first place, against the item "eczema" in particular. A reaction seems to me impending; for the simple reason that observers are discovering that this system is capable of such development as will make it the best natural division of the diseases to which it relates. My strong belief, after careful clinical observation and considerable thought, is that, on the whole, Willan's rendering of eczema—which has been greatly misinterpreted—is the most philosophical, the truest to life, and compares favourably with the endless divisions and readings of that disease as given by modern authorities.

It is a matter of considerable regret that so few have made themselves personally acquainted with Willan's writings. The prevalent idea that Willan was a mere dermatologist is as erroneous as it is unfair. Before he

* Willan gained the Fothergillian gold medal in 1790 for a thesis which included the outline plan of his after-arrangement of skin diseases.

penned a line upon cutaneous matters, he had for years been accomplishing a masterly grasp of the phenomena of diseases in general, and had analysed them with peculiar originality. Whatever special clinical appreciation of matters cutaneous he exhibited, is to be explained in great part by the fact of his having been the accomplished physician, and his bringing to bear the facts and analogies of the general, to aid in the interpretation of those of the special, subject. Because he was so accurate an observer of disease in general, therefore was he so successful in his dermatological pursuits.

No one can help coming to this conclusion after perusing his report on the diseases in London in the years from 1796 to 1800,* in which he gives the results of his own observations from month to month. His close scrutiny of disease, his accuracy in diagnosis, his keenness in seizing every occasion for making pathological examinations, and his discriminative judgment in the treatment of disease, show how thorough his knowledge was, and not only thorough but advanced ; and this is well evidenced in his remarks on the general effects of spirit-drinking, the cause of purpura and of fevers, the effect of drainage in lessening the occurrence of ague, the necessity of fever hospitals and the isolation of fever cases, the connection of cutaneous diseases with uncleanliness, the influence of special trades in inducing disease, the antiquity of small-pox, and many other matters.

I don't think the mention of these particulars out of place here. They help us to understand how it was that amid such confusion as existed in his day relative to dermatology Willan was enabled to rearrange and reclassify so simply and satisfactorily a mass of phenomena then in utter confusion. Before Willan's time diseases of the skin had been grouped upon the most fanciful plans.

* Miscellaneous Works of the late R. Willan, M.D., F.R.S., &c., edited by Ashby Smith. London : 1821.

Plenck* may be considered as the first who made any satisfactory attempt at a clinical groupage according to external appearances. His fourteen classes of maculæ, pustulæ, vesiculæ, bullæ, papulæ, crustæ, squamæ, callositates, excrescentiæ cutaneæ, ulcera cutanea, vulnera cutanea, insecta cutanea, morbi unguium, and morbi pilorum—included under the same heads essentials and accidentals together. Willan's clinical acumen and careful research enabled him to produce a more perfect scheme.

Willan took the leading features of the several diseases at their height of development, and he was not misled like Plenck in trusting to the peculiarities of diseases imperfectly developed—an error into which moderns fall. Willan thus distinguished between primary and essential, as contrasted with merely secondary appearances. He might have been somewhat indebted to Plenck for a hint in the formation of his scheme. It would be most correct, however, to say that, unlike his predecessors, he did not adopt the definition of the ancients without examination or reserve, yet he did use what he could—so as to avoid the coining of new terms, the curse of modern dermatology—as the retention of the names of six of the fourteen classes of Plenck shows. Further, Willan did not so much adopt Plenck's terms in part, as give them a more definite signification, a rendering which, as Mr. Wilson remarks, "we use at the present day, and which must continue to be used as long as cutaneous medicine is made a study. The definition of the papulæ, squamæ, exanthemata, bullæ, pustulæ, vesiculæ, tubercula, and maculæ is precise, and identified with the language of cutaneous medicine; whatever difference may exist among authors with regard to the classification which, to them, seems the best for the illustration of the subject."†

It must be remembered, in connection with Willan's

* Plenck (J. J.), Doctrina de Morbis Cutaneis, quâ hi Morbi in suas Classes, Genera, et Species rediguntur. Vienna, 1776, 8vo.; Ibid. 1783, 8vo.; Lovani, 1796.

† On Diseases of the Skin, 6th edition, 1867, p. 101.

cutaneous work, that death took him away just as he had commenced it, and when he had published the particulars of four of his orders only. He died at Madeira in 1812, where he had gone for his health, and at the age of 54, leaving behind him a manuscript for Bateman to produce, which was done in the following year. Who can doubt that had Willan lived he would have elaborated and perfected his work? That was left for his successors.

As time went on, new observers sprang up who had their own interests to serve, and then commenced the imperfect exposition of his views, which has been handed down to the present time. For moderns, with very general consent, regard Willan's terms as signifying initial lesions, or merely stages, and not as signifying the leading characters of the diseases at their height. This is an error that Englishmen should be most anxious to rectify.

Willan's contemporaries and immediate successors—Rayer, Biett, Cazenave, Schedel, Gibert, and others—clearly recognised the fact that in his scheme diseases were classed according to the most prominent features at the height of the development of these diseases, a fact which modern dermatologists have altogether lost sight of; and, moreover, whilst profiting by his labours, and using the clinical data which he bequeathed, and incorporating them as part of their own systems, they at the same time are casting discredit upon him, and coining the term "Willanist" as one of derision. The great Hebra himself is an offender in this respect, and it is the more important to prove this, since he occupies so prominent a position in the realm of dermatology, and largely influences men's beliefs. Speaking of the classifications of such as Willan, Biett, Gibert, and others, which are based on one common plan, Hebra* says that these and others have, in fact, been the great cause of the erroneous notion that, for the recognition of a cutaneous disease it is sufficient to deter-

* On Diseases of the Skin, vol. i., p. 45. New Syd. Soc.: 1866.

mine the primary efflorescence which existed in that particular case; as though for the determination of a disease a single character is sufficent, although it be torn from its connection with the other symptoms with which it is associated, and although all the other appearances which present themselves in the course of the case are left unobserved, and the only point investigated is, whether at its commencement the affected parts presented a macule, a papule, a vesicle, a bulla, a pustule, or some other primary form of efflorescence! Hebra proceeds to indicate that all the erroneous conceptions of skin diseases which we meet with in all directions take their origin in the mistake he refers to, which divorces the local from any connection with the general. Now, speaking for Willan, let me say that he never characterizes—and this is the point I have been wishing to reach—affections according to their initial stage; nowhere will this be found in his writings. He says he wishes to constitute general divisions and orders of diseases "from leading and peculiar circumstances in their appearances." He names diseases after their leading features at the period of maturity. The initial lesion, or primary efflorescence, is nothing with him. More than this, he takes into account the general characters of the disease—he unites, and does not divorce, the general and the special—and its relation to constitutional states, and the like. He distinguishes between imperfect or abortive forms of eruption and characteristic and typical conditions. No one can read his description of eczema without seeing that he was fully alive to the fact that the early stage of the affection might be a redness, a papulation, and so on. Bateman, indeed, speaking the views of Willan, declares expressly that "the natural progress of many eruptions is to assume a considerable variety of aspect, so that it is only at some particular point of their course that their character is to be unequivocally decided." When, therefore, it is said in the future that Willan arranged diseases according to their initial lesions, I hope every one who hears me will repudiate it. Once and for all

let this point be understood, and let us evermore do Willan justice.

And now, what were Willan's views of eczema, the particular disease with which we are now more especially concerned? What did he really mean by that disease? The term had half a dozen different meanings just before his day, as implied in the use of the synonymes herpes fonguеux, dartre vive, scabies fera, &c. In 1777, Lorry* employed it, as Hebra remarks, in the same sense as the ancients, and to a condition which reminds one of carbuncles and boils. Willan was more in accord, in his use of the term, with Ætius (A.D. 543), as in the passage, "*eas* ἐκζέματα *ab ebullientc fervore Græci vulgo appellant*," when he defined the affection to be "characterized by an eruption of small vesicles on various parts of the skin, usually set close or crowded together, with little or no inflammation round their bases, and unattended by fever." That is to say, this was the typical condition of the disease at maturity. Three varieties were made,—*E. simplex*, the result generally of irritation occurring in exposed parts, and running on at times into a state like impetigo; *E. impetiginodes*, in which there are vesico-pustules, pain, heat, smarting, ichoration, fissuring, and the like, often seen in grocers'or bricklayers' itch, as the result of the irritation of lime or sugar; and *E. rubrum*, commencing as an erythema, but differing in the subsequent development of vesicles, accompaned by swelling of the integuments, great tenderness and itching of the skin, free ichorous discharge, fissuring, crusting, and the like. Now, Willan was perfectly aware of the varied appearances presented by eczema. In his description of eczema rubrum he speaks of the first stage being erythematous, and rough to the touch. What is this but the pityriasis rubra, or eczema squamosum of some moderns? He points out the frequent papulation. He says of a later stage, that the "ichorous discharge is the most characteristic feature;"

* Tractatus de Morbis Cutaneis, 1777, cap. iii., p. 77.

that "it stiffens linen;" "the surface has deep fissures," is covered "with partial scaly incrustations," and in the latest stage, "a roughness sometimes remains for a considerable period, like a slight degree of psoriasis."* Here we have the recognition of eczema ichorosum, eczema fendillé (or fissum), and eczema squamosum of authors again. Willan refers particularly to the relation between eczema and impetigo,† though he should have included certain of his porrigos under the latter term. He recognises certain stages of inflammation, but he does not dignify any of these by the title of a perfect disease. Now, what have moderns done? Their cry is that eczema is not always vesicular, and therefore Willan is in error. True, vesicles are not always seen; Willan never asserted that we must always positively have vesicles. He affirmed only their typical significance; but he said that their formation was the "full height of the disease eczema." Hebra‡ remarks that Willan described and delineated only certain forms of the affection, and thus left his contemporaries and successors abundant scope for further investigation, and gave different names to the same morbid appearances which belong to the several stages and varieties of eczema; and, on looking through the figures in his atlas, and the corresponding letterpress, we have no difficulty in recognising lichen agrius (pl. 4) in psoriasis diffusa, "peculiar to bakers" (pl. 11), in psoriasis palmaris (pl. 14), in the species of impetigo, which he calls respectively, I. figurata, sparsa, and scabida (pls. 34, 35, 36); and in his porrigo larvalis, P. furfurans, P. favosa, and P. faciei (pls. 37, 38, 41, and 42), not so many distinct maladies, but simply various forms assumed by eczema.

Now what form of eruption did Willan omit to notice? Hebra does not say. So-called eczema squamosum, papulatum, vesiculosum, rubrum, and impetiginodes he referred

* Bateman's Synopsis, 1813, pp. 254, 255.

† Pp. 146, 249, 250, loc. cit. ‡ Vol. ii., p. 79, loc. cit.

to, and these are all Hebra gives in his own system. As to the giving of names to different stages of eczema, this is not true, save in two cases—viz., bakers' itch, which he certainly calls psoriasis, and porrigo, which is impetigo. He distinctly speaks of lichen agrius as terminating in impetigo,* and of the relation of eczema and the ordinary impetigos. What Willan on the whole avoided was the very thing of which Hebra accuses him—viz., the giving names to stages. Hebra does this himself, as his terms squamosum, papulosum, and vesiculosum testify. Willan's division is based on the general clinical features of the disease eczema in all its varieties. Three groups are made into E. simplex, E. rubrum (or the inflammatory form), and E. impetiginodes (or that in which pus is early and freely formed). These are true varieties, not stages; each variety includes stages of erythema, papulation, vesiculation, &c. It is this division which I shall defend.

I cannot pass by Mr. Erasmus Wilson's views,† for he is the representative of English dermatology. He makes an "eczematous" group of diseases, including eczema, psoriasis—by which he means chronic scaly eczema,—pityriasis, lichen, impetigo, gutta rosacea, and scabies. The particular item, eczema, Mr. Wilson divides then into pathological forms—into two groups, regular and irregular, besides those of form and localization. The irregular forms of fissum, verrucosum, sclerosum, mucosum, œdematosum, neurosum, need not be specially noticed, because accidental and secondary characters alone distinguish them. We require, therefore, to refer only to the regular forms of eczema—erythematodes, papulosum, vesiculosum, ichorosum, pustulosum, and squamosum.

Now, I venture, with great respect for Mr. Wilson, to think that this division is objectionable, and tends to make us lose sight of the real disease. If we scan the six groups as they stand, we shall notice that the main feature is, after all, the occurrence of serous infiltration, which must neces-

* P. 11, loc. cit.

† Diseases of the Skin, sixth edition.

sarily tend to form vesicles, and then to give discharge. In the "erythematous" eczema, it is not the erythema, but "the infiltration of serum," that is diagnostic.* Scratch the erythematous stage, or watch it, and of its own course it weeps or discharges. Watch the papules, and they give out moisture, or are caused by serous infiltration.† The squamous stage is the *finale* of the other;‡ the pustular stage is only one in which the secretion is modified;§ the ichorous form speaks for itself.

I think it is best to give one description for eczema which shall comprehend the whole of the disease—all these stages, in fact, and to fix the attention on the main peculiarity—the tendency to discharge, which may be accompanied by those conditions which have suggested varieties.

Hebra makes, as you know, five varieties: E. squamosum, papulosum, vesiculosum, madidum, and impetiginosum. Now, how does Hebra get this division? Mainly by dividing eczema according to the results observed after the friction of croton oil into the skin in varying amount and extent. After recording what these results are, he says: "The above facts will surely suffice, with the help of clinical observation, to lead all experienced physicians to the same conviction to which my own studies have brought me, that eczema may be divided," &c. I demand that clinical observation should settle the case—by the aid of experimental research, if you like, but not in subservience to it. I am not prepared to admit that croton oil friction necessarily induces a true eczema. And see at the same time into what a confusion Hebra gets by adopting this artificial scheme of dividing eczema. He says: "I do not consider the formation of vesicles, and subsequently of a moist surface deprived of its epidermis, as sufficient to characterise the disease,"—he cannot, of course, if he takes

* See Wilson's Diseases of the Skin, p. 139, lines 1—4, and 11—14.

† Wilson, loc. cit., p. 132.

‡ Loc. cit., p. 141, line 26, et seq.

§ Loc. cit., p. 141.

croton oil eruption as his typical eczema,—"but take in as *varieties* of the same malady, all the morbid changes seen in the course of development and retrogression of the ordinary vesicular and moist eczema." (p. 86.) Why, surely, he admits that eczema is essentially a discharging disease; and the discharge feature of eczema he makes the only sure diagnostic point, and gives prominence to it in his description of the forms of eczema which he makes, as we may at once ascertain by referring to his descriptions of individual diseases.* This is the more recognisable in scrutinizing those sections which give the differential characteristics of eruptions like eczema in appearance. For instance, the variety E. squamosum, which may be the beginning or end of an eczema, is distinguished from pityriasis rubra by the presence of "vesicles, crusts, and moist patches, which rarely fail to accompany true eczema, to however small an extent." (p. 121.) Cases of true pityriasis rubra cannot be termed an eczema, because "the oozing and the vesicles which belong to that disease are not present at any period of its duration."† In giving the distinguishing marks of lichen ruber and eczema, the same discharge or weeping feature is pointed to as the most important. Hebra, like many others, makes mere stages *varieties* or forms of eczema. "A period of involution" suffices to be dignified by the position of a separate variety. Willan did not call stages varieties. His are true *varieties*, having special general characters, and embracing each the *stages* of redness, papulation, vesiculation, ichoration, and squamation, which he fully described, but which are now exalted by others into the position of varieties. Truly, he seemed to be speaking of the very errors into which we were likely to fall when he observed in the preface to his

* As regards E. squamosum, vol. ii., p. 70, lines 15—20; E. papulatum, vol. ii., p. 87, lines 34—37; and E. vesiculosum, vol. ii., p. 86. The other varieties speak for themselves in reference to the point in question.

† Hebra, loc. cit., p. 70.

work published in 1798: "They [modern authors] make artificial arrangements by no means consistent with each other; some reducing all the diseases under one or two genera; whilst others, too studious of amplification, apply new names *to different stages of the same complaint.* . . . . There seems to be a peculiar impropriety in classing the diseases, as some have done, from hypothetical principles rather than from their obvious characteristic appearance."

But it was necessary that Hebra's *definition* of eczema should not imply the absolute necessity of discharge or vesiculation, because his eczema must include such things as the so-called papulous eczema and eczema marginatum. The last has now been shown to be a parasitic disease; hence we omit from the current eczema of the day one item which seemed to bear testimony to the fact that eczema may be a "dry" disease. Again, one of the two conditions making up the so-called "papulation" of eczema, and a consideration of which appeared to show the same thing, is not eczema at all. I refer to the papules formed by congested and erected follicles—those which are referred to by both Hebra and Wilson as being seen especially around the circumference of patches of eczema. Mr. Wilson distinctly calls this E. papulatum.* The condition is altogether accidental; it is not peculiar to eczema, but is common under any circumstances in which the skin is congested and irritated. The true papule of eczema is that one which—and Hebra refers to these particular papules and describes them correctly—becomes a vesicle. It is not a congested follicle. Hebra says—in comparing the early stage of lichen ruber, for instance, with the papular stage of eczema,†—"This eruption, eczema, is attended with the formation of papules the size of millet-seeds or hemp-seeds, of a pale or dark red colour, presenting no scales, but containing a transparent fluid, which escapes on pressure being applied to them; . . . . . they are frequently accompanied by vesicles." In other words, the true papulation of

* Loc. cit., p. 132.

† Loc. cit., p. 63.

eczema is early vesiculation; it differs from congested and erected follicles, and is also not true lichen. The argument, therefore, derived from a consideration of the fact that the papulation produced by congested follicles does not transform itself into vesiculation is worthless as indicating that eczema may be papular, and papular only. Now, excluding eczema marginatum and the papulation produced by congestion of the follicles, we have, even in Hebra's description of the disease eczema, the greatest prominence given to the discharge—that is *the* diagnostic feature of the affection; and when discharge occurs in eczema, there must have been, for however short a period, a vesicular stage. After all, then, Willan is not in error. But one more reference to Hebra. He remarks that he is "justified in laying down as a law that eczema appears and runs its course in five different varieties, which, arranged according to their relative intensity, will be—E. squamosum, E. papulatum, E. vesiculosum, E. rubrum *seu* madidans, and E. impetiginosum." This quotation at least leaves us no room to doubt that Hebra implies that these exist often as independent conditions from first to last. There is something more implied here than that these varieties are stages; they *appear*, we are told, *and run their course in five different varieties.* But Hebra, in his definition of eczema, says he includes all the morbid changes seen in the course of development or retrogression of the *ordinary vesicular and moist eczema.* He speaks, too, of the E. squamosum being the beginning or the end of eczema, whose diagnostic feature is discharge; of papules that become vesicles, and of vesicles that become pustules; in fact, of transitions which make his varieties stages, and stages only. What does he, then, mean by affirming as a law that these stages appear and run their course as different varieties? In truth, so clinical as Hebra usually is, he is least clinical in his treatment of eczema. Need I say, Sir, that I differ from Hebra in the spirit, I hope, of a scientific man; and because I differ, it does not follow that I do not greatly respect his views.

In reviewing the discussions which have been carried on with regard to the nature of eczema in recent times, therefore, we notice several kinds of erroneous observations. In the first place, cutaneous pathologists have not attended to the history of the disease as a whole; secondly, they have taken imperfect developments as the satisfactory representations of the disease, or an exceptional state—such as an abortive form—as such; thirdly, they have confounded similars with identicals, as in the case of the several papulations seen in connection with eczema; and, fourthly, they have erred in imperfect observation, especially forgetting to seek for the evidence of transitional forms in the so-called "varieties" of eczema, and in including under the latter, diseases different from it in nature; such as eczema marginatum, or, as it should be called, tinea circinata. Moreover, in subdividing eczema, they have elevated stages to the rank of varieties. Perhaps it may be well to let fall here a general recommendation in reference to the first of these points—that is, inattention to the history of eczema as a whole. When a case of cutaneous disease presents itself to the practitioner, and its aspect leads him to think it an eczema, the one question which should receive early solution is this: Does it discharge; or, if not, has it at any period of its existence wept, oozed, or discharged? A reply in the affirmative settles the diagnosis at once. Now my experience is, that the past history of such cases is neglected. It is easy to call a case of chronic scaly eczema an E. squamosum, and to assert that it has always presented its then existing characters—that it is a primary form of disease; but it is not true to fact. Let us remember that the majority of cases of eczema have existed a long time before coming under observation, and that important stages have passed in the mean time. Out of 859 cases which I quoted some years ago,* in all but 38 the disease was not seen by the reporter until it was more than a

* British and Foreign Medical and Chirurgical Review, Jan. 1866, p. 160.

month old; in no less than 404 instances, until it was between one and ten years old; in 223, between one and six months old. If we were concerned with a case of pneumonia or pericarditis, we should distinguish between its late and early stages, and we should seek carefully for the latter. So should we deal with skin mischiefs.

You will demand of me now a definition of eczema, and a division into varieties free from the faults already mentioned. I think this can be given. But to that end we should recognise more distinctly the discharge feature of eczema, and substitute that for Willan's vesiculation, as the character which is most peculiar to a typical case of the disease. The fact of discharge being present implies the antecedence of certain stages of inflammation, and the succession of follicular congestion, crusting, fissuring, induration, and so on. Let me put it thus: Eczema is an inflammatory (catarrhal) affection of the skin, which is mainly characterized by a peculiar discharge, stiffening linen, and drying into thin yellow crusts. It has its stages in the fully-developed disease of erythema, papulation, vesiculation, discharge, pus-formation, and squamation, which may each, under different circumstances, be more or less pronounced. As in all other inflammatory diseases, secondary results may follow; such as induration, fissuring, œdema, and the like. There are then essentials and accidentals, as in all other diseases. It was the essential features, the free vesiculation, or the occurrence of a special exudation, which at one stage of the disease uplifted the cuticle into vesicles, seen in well-marked cases that attracted Willan's attention, and which he defined as characteristic. I think he was right and philosophical in what he did. I have before shown that he was fully acquainted with the stages of eczema called varieties or forms by modern writers, and that he expressly contended against the division of eczema into varieties according to its stages. But I have yet to give a division. You will have gathered, of course, that I seek to justify Willan's plan; and as I hope

to have enlisted your own clinical experience on my side as regards the views expressed as to the history, so do I appeal to the same to substantiate the thorough clinical utility of Willan's three varieties. Take the first hundred cases of eczema that enter a clinique, and we shall be able at once to recognise that some eczemas are seemingly entirely local, being often induced by local irritants. There is some, but not very much, inflammatory action—no implication of the deep tissues; and local remedies suffice for the cure. In other cases several parts of the body are affected at one time; the local mischief is severe; there is much heat, and itching or burning sensations, perhaps pain; the cellular tissue beneath the skin is implicated in the mischief; the discharge is not only free, but irritative to the parts around, and the general system sympathizes, whilst there may be distinct ill-health, dyspepsia, a gouty diathesis, and the like. In a third class of cases, occurring in young and lymphatic children, there is very free and early formation of pus, out of proportion to the degree of inflammation as compared with the last form of eczema, indicating a pyogenic habit of body well marked. There is also free crusting, and often distinct evidence of the scrofulous diathesis in the family history. Now though these now and then run the one into the other—and there are no hard-and-fast boundary-lines in medicine—yet on the whole the distinctions are clear, and the terms simplex, rubrum, and impetiginodes accurately portray these clinical varieties.

It is only right to give Hardy credit for the thoroughly Willanean view which he takes of eczema. He gives especially prominence, as in my own description, to the discharge rather than the vesiculation of the disease. His definition of eczema: "Une affection caractérisée au début par le développement de vésicules et vésico-pustules petites et agminées, ou par des éraillures épidermiques donnant lieu à une sécrétion séreuse ou séro-purulente, plus au moins abondante, susceptible de se concréter en croûtes et se terminant enfin par une desquamation

écailleuse de l'épiderme."* The varieties are Willan's, plus an eczema fendillé, the E. fissum of English authors. Now Hardy says that this exists sometimes as a distinct entity, but he also adds that it is at other times associated with ordinary vesicular eczema, or it is a final stage of the latter. In those instances in which it is affirmed to exist alone, there is still the pathognomonic secretion present, and we know from experience that there must have been a transient quasi-vesicular stage. The eczema patch does not have fissuring as the first and primary phase. The fissuring is not an initial lesion even, but it results as a consequence of certain inflammatory changes in the derma. It is an accidental affair, common, not to eczema, but to many different diseases of the skin—to psoriasis, cancer, rodent ulcer, syphilo-derma, &c. It is not of so much importance as to justify its being made the ground for a variety, if for a stage of eczema. With this exception, Willan, Hardy, and myself are at one on the subject of the characters and varieties of eczema.

Pray let us simplify, as we may do, the whole question of eczema, and especially prune down the prolific nomenclature with which it has been associated. Some authorities have managed to describe twenty and more varieties, whilst three are alone necessary. Whilst we accept them as best in harmony with clinical observation, and as indicating most conveniently appropriate treatment, we should not forget that each must have its *stages;* that these stages may, under different circumstances, be better marked at one than another time, according to the age of disease at which the physician sees it, and the intensity of its expression ; and that our conception of eczema must be, not piecemeal, but one inclusive of all its stages as one whole affair. If we speak of stages, let us call them stages, and be chary of the abuse of the term variety.

No mention has been made of abortive development. Theoretically it may be true that an eczema now and

* Leçons sur les Maladies de la Peau, 2ème édition, Paris, 1860, p. 36.

again may apparently abort at the first, second, or third stage, and, as a consequence, very rapidly assume a scaly or a fissured appearance, but clinically this is so unfrequent as to be of little practical moment. We could not accept a definition of eczema which was based upon an *imperfect* condition, any more than we could be satisfied with a description of "latent" as a portrait of the ordinary typhoid fever. Imperfect or abortive development rules more or less in every disease to which the body is subject, and in the case of eczema as much as any other. "The rule" in the mass of cases is *that* to which we must give prominence; practically the exceptions to it in regard to eczema are not worth notice.

Whether right or wrong in my opinions, at least it is after very considerable thought, and much canvassing in the presence of actual disease, that I have arrived at the conclusion that Willan's arrangement and general description of eczema is the best yet written; and that, developed, and but slightly modified in accordance with the progress of pathological science, it is the truest to nature. It were unaccountable that Englishmen are so ready to let the views of our illustrious countryman, who died in 1812, be misinterpreted without a single protest, and the credit of establishing a true clinical reading of eczema be taken from one of themselves, but on the ground of the ignorance which prevails in regard to what he actually wrote.

LECTURE II.

Morbid Anatomy of Eczema—Biesiadecki's Researches—Minute Changes in the Skin—Etiology—Eczema not a Blood Disease; perverted Innervation at the bottom of the Disease—Influence of Local Irritants; of Constitutional Conditions; of Organic Disease of important Organs — Hereditary Transmission — Substitutive Eczema.

MR. PRESIDENT AND GENTLEMEN,—In my first lecture I endeavoured to prove that a careful examination of the writings of Willan seemed to show that he gave us the general outline of the best clinical description of eczema and its varieties yet written; that the labours of this distinguished man are appreciated much less than they deserve; that the plain meaning of his own words has been misunderstood; and that consequently much confusion has arisen in regard to the principle upon which he classified, not only eczema, but cutaneous diseases in general. Further, my remarks were intended to show that it was in reality the occurrence of a certain "discharge," or, if not that, at least the stage necessarily antecedent to that discharge, which Willan recognised as the leading feature of eczema, and that in the differential diagnosis of eczema and other similar affections this is *the* point to which an appeal is made by moderns. Further still, I drew attention to the error of constituting stages varieties of eczema, and asserted that, whatever may be the results of experimental inquiries, clinical observation goes to establish the correctness of Willan's subdivision of the disease into the three varieties of E. simplex, rubrum, and impetiginodes.

On the present occasion I proceed to discuss the pathology and etiology of eczema; to describe the minute textural alterations that take place in the skin, and coincident changes noticed in the solids and fluids of the body generally. In considering this last matter, it will be advisable to trace out, as far as possible, the relation which eczema bears to certain "constitutional" conditions.

Speaking in general terms, we may describe the morbid anatomy of the disease in its earlier stages as consisting of swelling of the cells of the epidermis, together with infiltration of serum into the substance of the corium; this fluid then finds its way to the junction of the rete mucosum and corium, separating the two more or less, and uplifting the cuticle so as to form vesicles. There is also capillary congestion. When the cuticle is ruptured, the deep layers of the rete mucosum, or even the corium, may be exposed. In other cases the cells of the rete are intermingled with pus-cells that seem to take origin from those of the fibro-cellular tissue.

But it is necessary to go into greater detail. Neumann,* in some experimental researches into the production of eczema in animals by artificial irritation, found that the earliest stage in the disease was a rhythmical contraction of the capillary vessels, followed by complete stasis, the free effusion of serous fluid, and lively proliferation of the cell-elements of the skin, especially in its papillary layer. This latter condition was coincident with the formation of vesicles. In chronic eczema there is cell-proliferation observed about the vessels, even in the subcutaneous fat, in addition to the hypertrophous enlargement of the tissues of the skin itself. And at this point the results of Biesiadecki's researches† come in to confirm and to add

* Lehrbuch der Hautkrankheiten. Von Dr. Isidor Neumann Wien: Branmüller. 1869.

† Beiträge zur Physiol. und Pathol. Anat. de Haut. Sitzungsberichte der Wiener Akad., vol. lvi., p. 225.

to the phenomena observed by Neumann. Biesiadecki notices that there are always certain elongated cells intermingled with those we ordinarily describe as making up the rete mucosum, and th t the former cells are derived from the connective-tissue corpuscles. Now in acute eczema, when the papillary layer of the cutis is being distended by serous effusion from the capillaries in the way described by Neumann, these spindle-shaped cells undergo rapid changes. Not only are they increased in size, but in numbers. They are likewise pushed forward to the surface, together with the cells of the rete; but, more than this, they branch very freely, and, according to Biesiadecki, their branches unite so as to form a complete network of canals, in the interstices of which the ordinary cells of the cuticle lie. It is believed that through these canals, so formed, the large amount of fluid discharged in eczema finds its way to the surface so readily. Biesiadecki also affirms that pus-cells, when present, are derived from the connective-tissue corpuscles.

But this question occurs here—What relation exists between the capillary congestion and the cell-proliferation? Is the vascular alteration the consequence of cell activity—that is, is it the response to a hyperactivity of the cell-elements, which acts, if I may so say, as a *vis a fronte?* Or is it the reverse?—is the cell-proliferation the result of an increased supply of nutrient fluid sent to or retained in the part? I am much inclined to think that in eczema both cells and vessels play an important and somewhat independent part in obedience to a nerve-paresis. Mere capillary excitement does not give rise to eczema. If that were the case, we should have the erythemata overstepping their present limits. Mere capillary changes are unaccompanied by special cell-changes; but these latter involve the former. *A priori*, one is led to believe that there is some cause at work which directly stimulates the cell-proliferation in eczema, and that the direction which this takes towards pus-formation on the one hand, or fibrillation on the other, depends upon the general nutritive ten-

dencies of the person attacked. The active cell-proliferation may imply and induce capillary excitement; but it seems that the two things are coincident. Now what can account for this duplicate condition? I think an alteration in the innervation of the part attacked. Looking to the general mode in which eczema is induced, to its history, and to the results which have recently been published by Heidenhaim, Pflüger, Eckhard, and others, as to the influence of nerve-irritation in the production of tissue-changes, I am quite disposed to agree with Hebra that in eczema "it is *faulty innervation* which is the most important element in its production." (Vol. ii., p. 140.) I said that cell-changes of a peculiar character were seen in the rete mucosum; and not many months since Podcopaew apparently demonstrated that nerves run up and form exceedingly minute plexuses between the rete mucosum and the upper laminate epithelium. These observations are recorded in a recent number of Max Schültze's "Archives of Physiology." Perhaps I ought to say that, though Hebra believes that perverted innervation is the prime cause of eczema, he thinks it leads "to congestion and other disturbances of the circulation," and does not refer to the influence of nerve-irritation in inducing cell-proliferation. This latter is, I think, a necessary point to be admitted in explaining eczema.

But let us contrast for a moment some other neurotic diseases with eczema, and see whether the line of argument here used is countenanced. Herpes we know to be dependent upon nerve-paresis; here we have a temporary affair, and, unlike the case of eczema, under conditions favourable to rapid recovery. In blistering, why do we not have more persistent changes, since a severe impression has been made upon the nerves, and capillary congestion ensues as a consequence? Why is there not active cell-proliferation? A reference to Biesiadecki shall explain it. He has carefully examined blisters, and found the papillæ enlarged and presenting lacunæ, the cuticle separated from the cutis over the papillæ, but

connected by fibrous bands in the interpapillary portion with the cutis, these bands being formed by the stretching and elongation of the cells of the rete mucosum. When the blister is well formed these fibres just mentioned are torn through. In fact the outpouring of fluid is so great and rapid that it disjoints cutis and cuticle, and, in fact, leads to the death of the latter; hence no cell-changes can go on therein as in eczema. When a blistering fluid is applied to the skin, and acts short of blistering under favourable conditions, eczema may result; that is, when it irritates the nerves but short of destroying the vitality of the tissues. In eczema the nerve-irritation is persistent and moderate.

If I am to refer to a condition analogous to eczema in any other part of the body, I shall refer to catarrhal inflammation of the mucous membrane. Here we have, as a consequence of the impression made by cold upon the part, serous effusion into the fibro-cellular mucous membrane, free outpouring of the same fluid, distension of the upper layer of the mucous membrane, answering to vesiculation, shedding of the epidermis, and the formation of more or less pus in the discharged fluid. Hebra is quite right in affirming that we need not, for an explanation of an attack of eczema, suppose a disease of the blood, or a *materia peccans*, expending itself on the skin as an *acrimonia sanguinis*, though I do not quite agree that we can induce eczema in perfectly healthy subjects—apparently healthy, no doubt, but not really so. But whilst this is true as regards the origination of eczema, I do hold most firmly that altered blood-states and diathetic conditions may greatly *influence* eczema, in a manner that will be referred to by-and-by. The distinction between the origination and the modification of eczema by changes in the blood-current or constitutional conditions, is a most important one to bear in mind. The fact, too, that the disorder of sensation, the itching, accompanying eczema, is not only often out of all proportion to the local mischief, but antecedes the eruptive phenomena, and

that is observed in affections clearly dependent on blood-changes but infrequently, constitutes another argument in favour of the neurotic origin of eczema. Again, the disease is as common in the upper as the lower classes, and this would only tend to substantiate the likelihood of its neurotic origin. It would certainly not tend to prove that it resulted from a blood-alteration consequent on bad living, poverty, and so on.

But speaking more particularly of the nerve-paresis, which is the main factor in the genesis of eczema: is this the result of the action of a so-called "exciting cause" alone, or does it exist prior thereto? In other words, can eczema, as Hebra asserts, be produced in perfectly healthy subjects by the application of irritants, for instance? I trow not. I care not for the results of experiments in this matter, but appeal to clinical observation. Did any of my hearers ever see a case of fairly-developed eczema in a subject in whom no sign of deviation from health could be detected? My experience has led me to conclude that eczematous subjects, as the rule, are thin, pale, and ill-nourished. Their skins are irritable and dry. They possess little, often no, subcutaneous fat; and mal-assimilation, exposure, over-work, anxiety, and other influences which induce a lowering of tone, have operated upon them. The eczematous exhibit "nutritive debility," which seems to me to affect the control which the nerves exercise over local nutrition, and to diminish the normal resistant power as against external and internal disturbants of normal circulation and cell-life. Take a given number of persons, and apply to their skins the same local irritant, and you will have eczema in some and not in others. *Cæteris paribus*, there is some one element in the former class of cases absent from the latter, which favours or permits the outbreak of the eczema. I think all clinical observation seems to show that this is a perversion of the normal innervation. It is evidenced in the occurrence of a localized eruption, because of the determining action of a local excitant; but

in other cases where this nerve-paresis is acted upon generally throughout the body, as by the circulation of gouty products, then is the local expression of disease—that is as regards the skin—also more or less general. An impressionable condition of the nervous system, or a lowering of nerve-tone, is an essential condition in the evolution of eczema, it seems to me. We come to the conclusion, then, from what has been said, that if faulty innervation be at the bottom of eczema, the existence of a dartrous or eczematous diathesis is not only unnecessary, but unproven. It must be remembered that I have said that constitutional conditions may *influence* eczema.

Admitting such a condition, as that described, at the bottom of eczema, it is easy to appreciate the action of one group of exciting causes that play a prominent part in the evolution of the disease: reference is made to local irritants of a chemical or mechanical nature; to the action of heat, cold, and water; the influence of occupation, in which the skin is stimulated by the blaze of the forge, the handling of sugar, flour, lime, or the like, and to the excitation of the surface by scratching. All or any of these may be in operation in a certain number of cases, even in some intensity, and yet no ill results will follow—at least in the shape of eczema; whereas in other instances, where they are by no means active, that disease readily shows itself. But there is a class of so-called causes that act from within the body upon the skin: various changes in the solids and fluids of the body. And here we are brought at once face to face with the influence of constitutional conditions in skin diseases. Leaving out of consideration for the present the case of hereditary disease, I venture to think that though there is no special blood-state upon which the local manifestation of eczema depends, yet that alterations in the nutrition at large may act in helping out the development of, or in modifying, eczema.

In the first place, general debility is often an accompaniment of the disease. In this case the resistent power or tone of the body generally is lowered; and it is

needless to argue that, under these circumstances, local irritants will do their work easily and effectually. Such a condition of things is very well evidenced in the cases of general eczema that occur in connection with an inactive state of the skin in persons of advanced age, who just begin to show decided signs of physical decadence. They are below par, are thin and spare, often depressed in spirits, have, perhaps, never had a day's serious illness in their lives, and do not understand how it is that they should be so attacked, though they feel that they have not been quite themselves for some time. No organic disease can be detected at the time, though it frequently happens that such shows itself not a very long time afterwards. Debility from age is their real complaint. A thorough chilling of the surface will induce an attack of eczema as much as that of bronchitis.

Secondly, all disorders which are connected with retention of excreta in the system, and their circulation throughout the blood-current, may furnish the exciting cause of eczema. This is a clinical fact of very great importance. Given the tendency to eczema, then the transmission of uric acid through the capillaries of the skin will so far derange as to aggravate certainly, and now and again excite, an eczematous eruption. This is what is meant by gouty eczema; and if we secure the absence of the uric acid from the circulation, the eczema will often disappear, and always be more amenable to treatment. The passage of uric acid through the cutaneous capillaries of an eczematous subject acts as much the part of an irritant as do some externals. The gouty diathesis acts in a precisely similar way upon other diseases—psoriasis or lichen, for example; and it is worthy of note that its influence is to lead skin diseases to assume what we know as an "inflammatory" aspect, as is the case in eczema rubrum. A gouty state of blood may, therefore, excite and modify eczema. Had time and space permitted, I should have been glad to give, in some detail, the history of several cases, illustrating the aggravation of ordinary skin-eruptions by the gouty

diathesis ; cases existing off and on for years, and saturated with arsenic and mercurials, but which were only relieved by recognising the complicating item of the free production and circulation of uric acid, and by instituting a *régime* calculated to arrest the continuance of those conditions.

Another instance in which the retention of excreta may be observed aggravating, and it would even seem occasionally exciting, eczema, is in the case of those beyond midlife affected with eczema of the legs. In some of these cases there is, and has been for some time, deficient kidney action, and if a careful analysis of the urine be made, a deficiency in excretion will be observed. In other instances, I am quite aware that an excess of urea may be detected in the urine ; but the latter is scanty, and it is doubtful if the total solids got rid of are in excess of that of health. At least, that particular treatment which is successful in the cases named seems fully to confirm the truth of the proposition that retention of excreta may influence eczema. But in some of these instances the presence of effete products, and even their excess in the urine, may be explained by the torpid action of the skin. Dryness of the skin is one of the features of the eczematous habit ; and an inactive cutaneous surface now and again is one element in the evolution of eczema, no doubt by the influence it has in leading to the impurification of the blood-current ; and where the kidneys at the same time fail to work perhaps as well as usual, the consequence must be the retention of waste products to a large extent.

It is scarcely necessary to speak of the connection between eczema and the circulation of bile-products, because the same line of argument as that already used holds good in this case. The passage of bile through the skin in a predisposed subject may certainly excite eczema. It must also be remembered that the presence of morbid products in the blood tends to retard the ordinary process of repair, so that the chronicity of a disease may well be explained in part by the conditions just now enumerated as dependent upon hepatic or renal derangement.

But let us proceed to notice another interesting matter —viz., the relation which obtains between eczema and the strumous diathesis; and here we shall notice that the existence of the latter leads essentially to a modification of the typical disease. I suppose it to be quite unnecessary to adduce facts and figures in proof of the presence of the strumous diathesis in a goodly number of those who are attacked by eczema, especially in the case of the young, and still more to show that the particular form of disease which is seen under such circumstances is what is called eczema impetiginodes. Now the leading peculiarity of this variety is the tendency there is to the formation of pus, and that from the outset of the disease; and this not from the intensity of the inflammatory action, for the pus-formation is not in direct ratio to the severity of the local disease. If anything is to be accepted in medicine, it is certainly the existence of a pyogenic habit in those who are strumous. What more is to be expected than that, when eczema is set up in the strumous, and cell-proliferation commences, the tendency to the formation of pus, so strong, should operate upon the changes that *ordinarily* go on, so that a modification of the usual cell-growth results? The eczema is present, but it is impressed by the peculiar nutritive tendency of the individual whom it attacks. And not only do we observe this influence of the strumous diathesis in young people, but now and then—I am inclined almost to say not uncommonly—in those of mature and even old age. One would imagine, from the little recognition of the strumous diathesis in persons of advanced age, that it wears itself out, or is non-existent, and non-operative after a certain time of life. I venture to think this a very grave mistake. True is it that those special declensions from health, and that general aspect of face and form, which are commonly accepted as characteristic of the strumous diathesis, are not observed in the aged; but there are not wanting the evidences of their past occurrence, whilst the tendency to pus-formation, to unhealthy ulceration, and indolent repair, in connection with that

particular kind of treatment which acts most effectually, points to the operation of an old strumous taint as best explaining the modification of eczema which is observed. The nature of that modification is well expressed by the tendency just mentioned to suppuration, ulceration, and indolent repair.

A typical case of the kind now under notice, in a woman about fifty-three years of age, was admitted, under my care, into University College Hospital a few months since. There were several large circular patches of eczema, of about three inches in diameter, about the arms, thighs, and shoulders, whilst both legs were covered by long straggling broad strips of the same, having the aspect of E. impetiginodes in its most marked form; the discharge was specially free, the crusting abundant, and in the legs there was a tendency to implication of the cellular tissue in the inflammation. The itching was very distressing. The woman was pallid and thin. She had recently lived very poorly. She exhibited the remains of strumous ophthalmia and enlarged glands about the neck, &c. She improved rapidly under the use of those remedies which serve us so well in strumous diseases. Now in this case there was not sufficient inflammatory action to account for the very free pus-formation, and the phenomena are certainly most satisfactorily explained by admitting the influence of the strumous diathesis in modifying the ordinary tissue-action of eczema. The cells in the rete and cutis in their proliferation take the form of pus-corpuscles, in obedience to the general tendency of the nutrition in such cases.

It is scarcely necessary to add that an eczema in a subject in whom the strumous diathesis is very marked exhibits sometimes a tardy recovery; indeed, it will necessarily follow—if there be a peculiar tendency (when the formation of cell-structures in the skin is deranged) to pus-formation, in consequence of the influence of a strumous habit of body—that the normal reparative process must, to some extent, be retarded, and this more than would be the case if the eczema were an uncomplicated one. This is

worth considering in regard to treatment. Then it is also true that if the strumous diathesis exists in a very high degree, the change in the skin may be so much exaggerated, especially by implication of the cellular tissue, as to lead to a certain amount of superficial ulceration, especially in young children. I can quite imagine some of my hearers rejoining that these are self-evident propositions. I will anticipate that much by remarking that, patent or not, these propositions are never observed as influencing men in prescribing, and, consequently, for any practical use which is made of them, may as well have never been acknowledged. Moreover, they do not form part of the common beliefs of medicine. Books tell us that their authors are of opinion that struma may cause eczema. That I do not believe, though confident that it considerably modifies the affection; and this *modus operandi* is not peculiar in any one disease. It would be well if we would more fairly recognise the *modifying* influence of diathesis upon all cutaneous diseases. Even the case of lepra—that disease of most constant and uniform aspect—offers no exception. In some instances of this malady, occurring in markedly lymphatic or certainly strumous constitutions, there is a tendency, if great debility or disturbance of nutrition occurs, by which the resistent power of the body is lessened (as, for example, after an attack of measles or whooping-cough), to the freer production and heaping-up of scales in the existing psoriatic patches, and the cell-elements of the patches approach more nearly in character to pus-cells than under any other circumstances. I have seen many cases of lepra in strumous subjects so modified in aspect—for example, after an attack of acute specific disease, as to give one the idea that there is a strong tendency to the intermixture of pus with the ordinary squamation, and this has been confirmed by microscopical examination. The acute specific disease in such cases merely acts the *rôle* of a debilitant, and so permits the pyogenic bias of the individual to bear fruit in the way mentioned. In like manner eczema,

occurring in a syphilitic subject, is often less amenable to ordinary treatment, and remains so until anti-syphilitic remedies have been employed.

I have thus far, then, concluded that eczema is not dependent upon the existence of a crasis or diathesis in the general sense of those terms, but upon an impressionable condition of the nervous system in which the control of the latter over the nutrition of the skin is somewhat lessened; that external irritants, acting locally or generally, and internal agencies, such as the circulation of waste and effete products, may excite eruptive phenomena, and that the changes in the cell-elements may be modified to some extent by the special nutritive proclivities of the individual. Theoretically, where external exciting causes are at work, and the eczematous tendency is not marked, the eruption will be localized; but it may be symmetrical where the exciting cause operates on symmetrical parts, as in the case of eczema of the hands in bakers and washerwomen, or when it acts generally on the surface, as in the case of cold. Where, on the other hand, the immediate excitant of eczema is an internal affair, then is the eczema more or less general, and it is in these cases that we meet with the inflammatory and impetiginous forms.

The history of infantile eczema may seem at first sight to stand in antagonism to these propositions; but, on careful analysis, it will be found entirely to confirm their truth. Let us call to mind the concomitants of infantile eczema. The tissues of the skin in the young, in the first place, are rapidly and readily irritated; slight friction, cold, or heat induces mischief, which is unaccountable save on the supposition that there is a great tendency to inflammatory changes involving disturbance of the circulation and cell-life of the tissues, incidental to infancy. A bronchitis is as readily evoked as an eczema. So that the skin is not peculiarly sensitive; and if it is possible to excite easily extensive changes in a mucous surface without the presence of any diathesis, it seems indeed strange that we should suppose that analogous results may not follow in the case

of the skin under similar circumstances. Then, secondly, infantile eczema is observed in lymphatic and often markedly strumous temperaments; in the ill-fed; in the hereditarily eczematous; in the uncleanly, and those who are otherwise badly hygiened; in the children of weak parents; in those who exhibit mal-assimilation, evidenced too plainly in the pale stools, the dyspepsia, the passage of food in a more or less undigested state, and the imperfect absorption of all fatty matter; after exposure to cold; in connection with debility consequent upon the occurrence of acute febrile disease; after the disturbance of the system produced by vaccination; in connection with teething; and so on. Now here is a catalogue of concomitants that lead to the *perverted innervation* to which Hebra refers. What room is left for the operation of a special diathetic condition? What need is there to suppose its existence? I see none whatever, if we recollect the peculiar excitability of the tissues of the very young, and the modifying influence of the strumous diathesis; the more complete interdependence of different parts and functions of the body in the young (involving the greater liability to extension of disease by reflex action and through continuity of tissue) than in the adult, and still more in the aged, and therefore the more powerful action, *cæteris paribus*, of even local excitants. It may be said that if the disposition to eczema be general, we really have a peculiar diathesis. If so, I reply at once that by an eruption due to a diathetic condition I understand an eruption consequent upon the altered nutrition of the part affected, in its turn a result of, or a response to, a change in the nutritive fluid flowing within the blood-vessels, by which a different pabulum from that which is found in a condition of health is provided. We have no evidence of this if we take away all that belongs to the strumous habit. In eczema the nervous control over the nutrition of the part affected is the essential disorder. In explaining diathesis we go to the blood; in the case of eczema we refer to the innervation primarily. I think we are apt to judge of the existence of a special dia-

thesis in infantile eczema because the strumous diathesis is in operation in the disease, but it is as a modifying agency. We fail to observe those facts which go to prove that eczema may originate in the skin and yet be modified by general conditions. The occurrence of an eczema without there being a diathesis, in the ordinary sense of that word, is not more difficult to comprehend than is that of an extensive bronchitis or muco-enteritis.

One word as to "syphilitic" eczema in infants. There are certain instances of pretty general and obstinate eczema in young children, in which there is not much discharge, not much crusting, but swelling, more or less induration and scaliness, sometimes dark scabs, accompanied by a dirty or actually pigmented state of skin, and often what looks like a pityriasis, with slight puckering about the corners of the mouth. Now and then there are patches of eczema nummulare about the belly, and coincident intestinal irritation, but apparently nothing else. These cases do not improve under the usual treatment for infantile eczema. They get well under anti-syphilitic treatment—at least the use of mercurials. There is often a history of syphilis to be found in the parents. The cases referred to do not arise out of a regular attack of congenital syphilis. Now, the fact that the bichloride of mercury cures them is not positive proof of their syphilitic nature, for it may be that, as in chronic eczema with induration, the remedy controls and alters the tissue-changes. I look upon these as instances, not of syphilitic eczema, but of eczema occurring in and modified by the syphilitic diathesis.

It may be well to make particular reference to the influence of teething in eczema. I find Hebra saying that "great abuse is made of the teething of children, as of their temperaments; and just as every cough, colic, fever, diarrhœa, cramp, or fit in an infant is put down to teething, so eczema is ascribed to the same cause when it occurs at this period. And although," he continues, "I by no means ignore the influence which this physiological process is capable of exerting upon the whole of the

organs and functions of an infant, yet I cannot admit it to be a cause of eczema." If Hebra means the absolute cause, I agree with every word so far; but I disagree in discarding teething as an exciting cause of eczema, and am sure that I shall be supported, not by traditional opinion only, but by the strong conviction, founded on personal and close observation, of men of the best clinical experience of our own time and country. Hebra's reason that teething is not a cause (exciting cause he must really mean, I take it) of eczema—viz., because any conscientious observer may convince himself that this malady may occur just as much before as during the period of dentition, and offer the same symptoms, the same intensity, and the same extent, without being in the least affected by the completion or delay of the eruption of the teeth—is not worth much. What he says is quite true, but it falls short of proving that teething *never* excites or influences eczema. Connected as the process of dentition is with febrile and gastric disturbance, with irritation of the nervous system, and, by reflex action, capable of influencing almost any part of the body, I cannot see how it can be otherwise that now and again the skin should be disturbed by it. The coincidence of irregular dentition with infantile eczema, the rectification of derangements of the former with subsidence of the latter, and suchlike relationships, seem to show that if teething be not the real cause, yet it may be the excitant of eczema.

So far I have said nothing of hereditary influence in the genesis of eczema. This is perhaps the most opportune moment to refer to it. Is eczema ever hereditary? It is quite certain that eczematous subjects do not necessarily transmit the disease, however marked it may be in their case. Further, having regard to the great frequency of eczema, it is certainly comparatively uncommon to meet with cases in which that disease seems to be hereditarily transmitted. On the other hand, there are occasions when the prevailing nutritive tendency in several or all the members of a family is to the development of eczema,

and at an early age, too; this tendency being apparently best accounted for by the supposition of an hereditary bias. Hebra remarks that the fact that in a few cases whole families may be found affected, must be viewed as exceptional when contrasted with the general results of experience. This is true enough, but I do not agree that it can only prove at the utmost that eczema in parents does not exclude its occurrence in their children. Of course it is in infantile eczema that we have been wont specially to recognise hereditary influence; but the conditions that concur to alter the nutrition of the skin, which I referred to a little while since, if given their due potency, seem to leave scant room for the supposition of any hereditary transmission in the majority of cases, equally with that of a peculiar blood-state. But, on the whole, I do not think that, as far as clinical observation goes at present, we can refuse, especially in cases where two or three or more members of a family are affected by eczema, and there is a history of the same disease in the parents, to allow that father or mother have really handed down the affection to son or daughter. I take it as unnecessary to appeal to the details of my note-book in illustration of this matter. What seems to me of importance to state is this—that, in order that eczema may be hereditarily transmitted to an offspring, it is not needful that there exist in the parent an eczematous diathesis in the ordinary sense of that term. If peculiarities of local form and aspect can be handed down, why may not dispositions to abnormal nutrition, localized in one organ or tissue of the parent be repeated in the child? If heart disease runs in a family, why may not skin diseases do likewise? If xeroderma, and its more advanced stage, ichthyosis, which are certainly not blood diseases, be hereditary—and they unquestionably are so,—why may not eczema behave in a similar manner without it being a blood disease? Admitting, therefore, the occasional hereditary transmission of eczema, I find in that event no ground for supposing that there is a special eczematous crasis or diathesis.

I have now analysed the disease under consideration in its supposed dependence upon constitutional conditions. Now I turn to notice the relation which subsists between eczema and other coincident local diseases, often affecting important internal organs. Bronchitis of a subacute kind is not an unusual coincidence, as in the case of many other diseases, but it sometimes has some special relation to the eczema. I have under my care at University College Hospital, at the time I write, a couple of interesting instances of the kind in two children, three and four years old, the subjects of general and chronic eczema, modified by the strumous diathesis, and which eczema has existed off and on since the age of a few months. Exposure to cold is almost sure to bring out the eruption afresh in the skin if the children are not in what is regarded by the parents as "good health." Not many days since I missed one of these patients, and found that the child had caught cold and become attacked by bronchitis, there being a large amount of expectoration. The skin during the attack, the mother remarked, got nearly well as regards the discharge and crusting, and this has been the case on several occasions. The brothers are very liable when young, the mother remarks, to bronchitis and eruptions also.

I may refer to the case of an affection of another mucous surface in connection with the occurrence of eczema —viz., that of the intestinal tract.

Here are the notes of a case which I took in the early part of the year 1864. M. A. S., three years of age; was always a delicate child, and was nursed by the mother till eleven months old, when she was fed on milk and corn-flour. Still she did not improve; and at thirteen months of age the doctors told the mother that "the child had enlargement of the glands of the stomach, and prescribed cod-liver oil." The bowels were always irritable. She is brought to me with a history of repeated attacks of diarrhœa and pain in the belly, and the passage of bloody mucous; and it seems that at eleven months of age four teeth appeared, and coincidently with this the diarrhœa

commenced. At the same time an eczematous eruption showed itself on the face and about the ears. The two—viz., the bowel complaint and the eruption—have always alternated, as regards their occurrence, ever since. The husband has remarked, spontaneously, on many occasions, that the child is always well in itself when it has a scabby head. The eruption on the face seems to be influenced by teething, for it is always worse when fresh teeth are making their way through the gums. The skin generally is dry and yet very irritable. A poultice—and especially a mild mustard poultice—will bring out an extensive rash; and then the mother says the child will itch "fit to go mad." As a general rule, for a long time the child's food has passed through the bowels more or less imperfectly digested. The hands are always hot, and the urine high-coloured. In the family history some clue can be obtained to the causation of this state of things. The mother is a pale, flabby-looking person, and one of her family, now fifteen years old, has been afflicted with inveterate eczema since the time of infancy. We have no need to imagine a dyscrasia in such cases upon which the bronchitis, the muco-enteritis, and the eczema are dependent, but only perverted innervation in mucous membrane and skin, which leaves these parts open to the influence of disturbing agencies, all the more certain to induce disease because of the bad feeding, the hereditary tendency to eczema it may be, the mal-assimilation or the like existing in any particular case; the eczema being modified by constitutional conditions. This is not the point, however, to be particularly noticed here, but the vicarious relation between the affection of the skin and mucous surface—a relation which has led to the use by some writers of the term "substitutive" as applied to eczema. There is no difficulty in understanding that, when active disease is going on in the mucous membrane, the skin will be quiescent, and *vice versâ*. One would be inclined to recognise in these instances the necessity for a specially tonic plan of treatment, and to question the value of

arsenic or any other agent that can in any way irritate the mucous surfaces. Save the fact that there seems in these cases a general disposition to irritability of the tissues—and there is every analogy between eczema and catarrh of the mucous surface—there does not seem to be much more of clinical interest in these cases, so far as the question of etiology is concerned. Authors have described the occurrence of bronchial asthma in connection with eczema, but the remarks just made touching subacute bronchitis may be held to apply generally to asthma, which is dependent upon the changes occurring in the air-passages during the persistence of the bronchitis itself. Another affection of a mucous membrane—viz., leucorrhœa—seems to bear occasionally the same relation to eczema as does bronchitis or intestinal catarrh—that is to say, it is "substitutive;" and I think I have seen something of the same kind in connection with the urinary passages. Now, in none of these cases is there any such thing, I take it, as metastasis in the strict sense of that term. The disappearance of an eczema from the skin, in connection with the development of a bronchitis, is a consequence, and not a cause, of the latter, which is evoked by its own special excitant, cold or what not. We find, of course, the affection of the mucous surface frequently absent in the severest cases of eczema, and *vice versâ;* but the occasional substitution of the one for the other, and the peculiar nature of the coincidence referred to, do certainly convey to my mind—that is, taking the whole history of these cases into consideration—the impression of the close analogy which subsists between "catarrhal" inflammation of the mucous membranes, in which the free secretion is the marked feature, and eczema; and it is open to proof that the two originate under similar conditions, and admit of the same essential treatment. Dyspepsia is a common companion, too, of eczema, and it may be in some sense substitutive, but not markedly or frequently so. It leads, when present, to debility, of course, and to imperfect excretion necessarily—two conditions eminently favourable to the occurrence

of eczema. I have no explanation to offer of the influence of uterine disorders upon eczema.

The influence of renal disease on eczema has been referred to. Anything which in those disposed to eczema throws additional work upon the skin may help it out, all the more certainly if the renal excretion of nitrogenous matters is diminished, and these, together with watery fluid, are accumulating in the system.

It has fallen to my lot to see several cases of eczema in connection with heart-disease leading to dropsy, and, I think, helped out by the general derangement induced by the altered circulation. Such cases are greatly relieved by treating judiciously the cardiac mischief.

It is necessary to say one word in regard to the part played by mental emotion in leading to attacks of eczema. Hebra says that the connection as cause and effect between disorders of the mind and mental emotions and eczema, which appears as an axiom in every book on the subject, is a mere fancy thrown out at random. I agree with him so far as to mental disturbances being true causes of eczema; but I think, in virtue of their depressing effect, when that is exercised upon the body generally, that they must leave individuals more open to the attack of disease than if they were not in operation, and they may play an analogous part to that of the last straw which breaks the camel's back.

Well, Sir, the clock warns me to draw my remarks to a conclusion. I will therefore try to gather up into a general statement the main propositions which have been submitted to your consideration. It has been the rule to regard eczema as an inflammatory disease, and the expression of a diathesis, styled by the French the "dartrous diathesis"—a convenient term, as McCall Anderson says, to cloak our ignorance of its nature. The word "debility" has been used to characterize the constitutional condition upon which eczema is thought to depend. What is really meant is that the local changes in eczema are due to an altered state of the nutritive fluids of the body, and pri-

marily of the blood. Now, I recognise the fact that eczema may be modified by diathesis, but that it is not essentially the result of any special alteration of the blood-current. We must look more particularly for the origin of eczema to the skin itself. Here we note that alteration of the blood, followed by hyperæmia, is quite incapable of explaining the phenomena of the disease, and that changes originating in the cells of the derma and rete mucosum have most to do therewith. Modern research seems to point to an altered relation between the nerve-force and the cell-life as the starting-point or the reason why eczema occurs ; for nerve-irritation certainly can give rise to cell-proliferation, and it seems clear that nerve-filaments run to, and lose themselves in, the rete where the changes in eczema are the most marked. Well, given "perverted innervation," as Hebra terms it, we can readily see how agencies, acting both externally and internally, can excite, evoke, or—not *per se*—cause eczema ; how eczema can be modified by altered blood-states or constitutional tendencies, such as gout or struma ; but, further, we do not explain the hereditary transmission of eczema by regarding it as a blood disease. The influence of organic or functional diseases of important organs is a matter requiring to be more distinctly appreciated, in so far as these throw more work upon the skin, lead to debility, or the impurification of the blood-current. The mucous and cutaneous membranes exhibit, it would appear, a remarkable similarity in regard to the essential pathological changes that take place in catarrh, on the one hand, and eczema on the other ; so much so as to lead one to suppose—allowing for difference of texture and accidental surroundings, such as heat, moisture, and exposure to the external air—that the two above mentioned are analogous affections. This is the more probable on a consideration of their now and then decidedly "substitutive" correlation. Speaking in broad terms, we should say, moreover, that the cause of eczema is multiple ; it is perverted innervation as a *sine quâ non*, but plus—not as causes, but part causes or excitants in a variety of com-

binations and varying frequency of coexistence—general debility, morbid blood-states, strumous diathesis, local irritation of the most diverse kinds, disease of important viscera, mental depression, and so on. This shows that the dermatologist must comprehend the nature of diseases in general ere he can treat skin diseases successfully.

Finally, I would remind you that the foregoing remarks refer to what is essentially eczema in its three varieties, each with its stages of erythema, papulation, vesiculation, pustulation, discharge, and squamation. There are certain secondary and accidental changes that we must not lose sight of—changes that are common to every form of chronic inflammation—namely, induration, atrophy, ulceration, and the like. Varieties have been made according to the varying aspect of these accidental and secondary changes; hence the terms Eczema œdematosum, verrucosum, sclerosum, &c. But surely in such cases the eczema has practically given place to what surgeons term "chronic inflammation," which reaches its highest development in the so-called "elephantiasis of the leg," or, more properly, bucnemia.

This outline of the pathology and etiology of eczema seems to me to give the clue to a satisfactory plan of treatment for the disease; and no one can accuse me, I trust, in my dealing with the question, of being the mere specialist.

LECTURE III.

Treatment of Eczema—General Indications—Necessity for ascertaining the Stage, Variety, and Complications of the Disease present—Soothing Treatment always needed in the Acute Stages; and Curative Measures, more properly so called, to be used in the latest Stages—A detailed Account of the General and Local Remedies called for in the three Varieties of Eczema, and the proper way and time of using them.

MR. PRESIDENT AND GENTLEMEN,—Amongst the firmest of the firm believers in the efficacy of drugs, I denounce the common practice of treating diseases of the skin in any active manner without a satisfactory diagnosis and a consideration of related general or local conditions. If no fair diagnosis can be obtained, then I deny the right of any physician to inundate the system with such misused and potent remedies as arsenic and mercury. I think, however, that the time has come when it is within the reach of every man to understand what is needed to be done, and how to do what is requisite, in the management of an eczematous disease. I will now attempt to indicate the main points to be regarded in dealing with this matter.

First.—I would remark that eczema is always a curable disease, though it may be made to assume a very chronic character by inappropriate treatment.

Secondly.—It is important to remember that a typical case of well-marked eczema has certain stages through which it must pass more or less rapidly in its progress towards cure—such as those of erythema, vesiculation, ichoration, and squamation. That in the earlier stages our object should be to moderate inflammatory action—I use

Note. Error in binding. Continuation of above will be found after page 60 next pamphlet

this term as a convenient one for the vascular and cell changes ; and in the later, especially that of squamation, to rouse the skin to a healthy action, so that those changes which are comprehended in the words "chronic inflammation" may be prevented occurring. The treatment is, as the rule, essentially palliative in the earlier, and curative in the squamous stages.

Thirdly.—Under certain conditions, however, we may really hope to cut short or to abort an eczema. This can be effected only in the slighter forms of the disease, more particularly those excited by local irritants ; or by the employment of treatment at the very earliest moment. In instances of eczema connected with internal disorder it is difficult and uncommon to prevent the disease running through its ordinary stages. We here desire to conduct the disease through and past its discharge phase towards that of squamation.

Fourthly.—It is necessary to be accurate in diagnosis. Excepting abortive forms of disease, which are sufficiently rare to be left out of account, it may be affirmed that the only sure and characteristic feature of eczema is the occurrence of a discharge that stiffens linen and dries into thin yellow crusts. Having ascertained the occurrence of this discharge, we know that we have to deal with an eczema. I may as well remark, *en passant*, that in a great many instances seborrhœa is confounded with eczema. I assume, in my present description of treatment, that these two diseased conditions are accurately differentiated.

Fifthly.—We must distinguish between what is essential and what is accidental in eczema. The capillary dilatation, the cell-changes, and the escape of fluid giving rise to vesiculation, and so on, with the disturbance of the epithelial formation, all dependent originally upon perverted innervation, constitute the essentials ; the strumous and gouty diatheses, organic diseases of internal organs, and the consequences of chronic congestion, &c., form the accidentals, which in some instances, no doubt, react upon the real disease.

Sixthly.—Eczema may be modified by general constitutional conditions, and by the influence exerted upon the system by organic diseases.

Seventhly.—If perverted innervation plays an important part in the genesis of eczema, and if cell-proliferation can be induced by nerve-irritation, then surely the main treatment of eczema must be of a soothing nature, especially as regards local treatment in the early stages.

Eighthly.—There is no specific for eczema. That is to say, eczema does not depend upon a special blood-state which is alterable by the use of any particular drug; for that is the idea which prompts the employment of specifics for eczema.

Ninthly.—It would seem that we have no better term than debility (pure and simple) by which to describe the general condition which is most intimately connected with the evolution of uncomplicated eczema.

Very well; we have, then, in eczema a curable disease, running, as the rule, through certain definite stages—the passage through which we should promote; aggravated by anything that "irritates" the skin itself, from within or without; occasionally relieved, or even aborted, in its slighter forms or earliest stages, by soothing remedies; liable to be complicated by accidental occurrences consequent upon the persistence of congestion, such as œdema, induration, atrophy, &c.; modified by constitutional conditions, especially gout, struma, and syphilis; influenced by organic diseases of vital organs—the liver, the kidneys, the heart, the stomach; associated always with a lowering of the general vitality of the system, and not cured by any "specific." I venture to lay emphatic stress on two of these points, viz., the modification of eczema by different constitutional conditions, and the necessity for adopting a soothing plan of treatment always in the earlier stages of the disease.

It is impossible for me to deal with my subject in such a way as to meet the necessities and peculiarities of every case that may present itself to the practitioner, so varied

are its complications and circumstances. I can only deal with the general run of cases. I assume that in all instances the practitioner starts by correcting any deficient action of the emunctory organs; that constipation, hepatic torpor, or congestion, dyspepsia, deficient renal excretion, or inactivity of the skin, as a whole, be remedied. It is the more necessary to attend to these matters in eczema, because the general debility involves in many instances a more or less sluggish action of the excretory organs, which, by loading the blood-current with effete products, does tend to retard the reparative process, if not to aggravate the eczema. The careful examination of the urine at the outset often reveals the existence of conditions that at once put us on the right track as regards treatment. Deficiency or excess of urea, the presence of uric acid or phosphatic deposits in large amount, or oxalates, may be detected under different circumstances, and point us to the brain or liver as in error, whichever the case may be.

Now it is customary, in discussing the treatment of eczema, to enumerate the remedies employed by different dermatologists, and the circumstances under which they are used. I wish to avoid such a plan, and as far as possible to sketch the method by which the physician should arrive at the proper treatment of any particular case, and to state why he is led to use this in preference to that general or local remedy. I will suppose, for instance, that we had before us now one hundred cases of eczema in living subjects. My object is to show what should be our guides in parcelling them out into groups for the employment of particular kinds of treatment.

There appear to me to be three questions which every practitioner should ask himself when a case of eczema falls into his hands for treatment—Of what variety is it? At what stage is it? And what are its complications?

First, as to variety. It is here that Willan's division of eczema becomes so satisfactory. Though, as I stated in my first lecture, there are no hard-and-fast lines between the simple, the inflammatory, and impetiginous varieties of

eczema, yet they are broadly distinguishable in the general run of cases.

Secondly, as to stage. If the skin of an eczematous subject be essentially irritable, as I believe, then, whenever and as long as any local inflammation is present, or there is pain, must we soothe. At the very outset of an eczema, sedatives may much abate, though rarely stay the progress of, the disease. This happens in cases of eczema simplex; but as a rule cases run on to the discharge stage. I hold most resolutely that until that stage is passed, and squamation is reached, nothing in the form of a stimulant or irritant should be applied to an eczema. Hence the consideration of the stage of an eczema, in my eyes, has a most important significance. When the stage of squamation has finally set in, the disease may be termed chronic, and we may stimulate. Until that is reached, however, the disease should always be regarded as acute, and be soothed. Perhaps this is the lesson, of all others, to teach in the present attitude of dermatologists in their cure of eczema. Further, when the stage of squamation has lasted some time, as before observed, we may have to treat chronic inflammatory thickening rather than eczema.

Lastly, as to complications. The very last matter mentioned is one of them; the others are chiefly general conditions of a diathetic nature, or functional or organic disease of important organs, and these we shall note in detail in speaking of general treatment.

But I may appear to have said too little in a general way of the internal treatment in relation to variety and stage; I hasten to add, therefore, that it follows from what has been said that there is one general rule applicable to all cases of eczema, and that is, that we should attempt to conduct all cases of this disease to the scaly stage as soon as possible. To moderate excessive tissue-change in the skin, and allay the nerve-irritation by general remedies in the early stage, is to aid in this object. But in eczema simplex no general treatment is requisite, save aperients and common tonics, it may be. In eczema rubrum, dys-

pepsia, gouty tendencies, and the circulation of effete products in the blood must be remedied. But in the case of eczema impetiginodes, the pus-formation is not an evidence of intensity of inflammation, but of a pyogenic habit of body ; and whilst we meet eczema rubrum associated with free pus-formation by salines, aperients, and the like, in the earliest stages, we *at once*, and from the outset, have recourse to cod-liver oil, iodine, iron, and the like, in the impetiginous variety, for these alone control the formation of pus here. We have learnt this, perhaps, empirically, and without giving a thought as to the reason. It will be noticed how Willan's division of eczema helps us in this matter.

In entering upon details, I shall speak of the acute stages first, and leave chronic eczema to be specially dealt with by-and-by. Let us first get rid of the treatment of eczema simplex: such as is produced by the action of external irritants—e. g., heat, sand, flour, water, soda (as in washing), arnica, sulphur, &c. Here the disease is localized, and the treatment is practically local also. The familiar instance of the eczema induced in washerwomen and housewives who do much washing, by the action of soda, may serve as a type of this variety. It is true that the attacked are often debilitated and benefited by tonics, but, as the rule, the exclusion of air from the part, its removal from the influence of the irritant, and the application of some soothing and absorbent remedy, cure the cases. If we use a lotion, which is preferable in the daytime, it is best to apply the following:—An ounce of very finely levigated calamine powder, with two drachms of glycerine, half an ounce of oxide of zinc, and six ounces of water. This may be applied, after being well shaken up, by means of a sponge or camel's-hair pencil, frequently (five or six times during the day), the powder being allowed to dry on. The air is in a great degree excluded by the powdery layer left upon the skin. I object to the ordinary calamine powder of the shops on account of the coarseness of its particles and its red colour. That made by Corbyn's, of

New Bond-street, is an excellent preparation. If there be much swelling, I prefer to use, in addition, some of the lead ointment of the old London Pharmacopœia, made by Blake, of Piccadilly, after Broodie's instructions, thinly spread on rag, and closely applied at night, and kept on with a few turns of a bandage. If at the outset of the disease there be much pain, then poppy fomentations may precede the use of the ointment, and the first application of the lotion in the morning. An aperient or two, with the dilute mineral acids and bitters as a tonic internally, and some tarry preparation locally at the fag end of the attack, suffice to complete all that is needed for the treatment of eczema simplex.

No better opportunity will be afforded me to say that no powder of any kind should be used to the skin of an eczematous subject if it be gritty, or if its particles be large. Special care should be taken to use perfectly neutral ointments. The lead ointment I spoke of should be made fresh every few days. The benzoated zinc ointment is advantageous on account of its non-rancid qualities. I am confident a great deal of harm is done by applying rancid unguents to the eruption of eczema. On the whole, ointments are best suited to the scaly, and lotions to the acute and discharging stages.

Now we turn to the next clinical variety of eczema in its acuter stages. There is a certain number of cases which seem to locate themselves on the border-land between this variety and eczema simplex. A typical case may be given as follows. A man (or woman), aged forty or so, presents himself at the hospital, and states that he is attacked by an eruption on the head and neck, which gives off a good deal of scurf. On inspection you notice an eczema in the squamous stage, affecting the whole scalp, accompanied by a good deal of irritation, and some slight redness. The eczema may extend down the neck, and there may be patches of the same kind about the arm, or the leg, or the thigh, and sometimes the trunk. The history does not give evidence that any marked inflammatory state has pre-

ceded, though the patient says the parts now attacked were hot, red, and discharged before the scales formed. The only thing about the general health is debility. The patient has had an anxious time in regard to his duties or his family; has worked hard and has lived fairly; but somehow or other has lost tone and flesh. He is not up to his usual mark. He looks pale, languid and thin; his assimilation is bad. Now alkaline baths, cod-liver oil, and the mineral acids, with tonics, quinine, or, if there be much atonic dyspepsia and itching, strychnine, with locally the calamine lotion, and presently a weak tar stimulant unguent, and not mercurial ointments, have never failed in my hands to cure. But the mass of cases falling under this head are more inflammatory, and connected with definite derangements of the general system. Mistake is often made in applying the term eczema rubrum to an eczema which attacks the bends of the joints only. It should be appropriated to the disease according to its inflammatory character, and not its seat. It is at the same time true that eczema rubrum very frequently involves the flexures of the joints.

Well, supposing that we have a well-marked case of eczema rubrum to treat, let us take the general remedies first of all. I am in the habit of teaching that we should search for one or more of the following conditions: (1) an hereditary tendency; (2) the strumous diathesis and bad feeding in young life (well marked), and strumous taints in the old; (3) simple debility; (4) chronic dyspepsia; (5) gout; (6) nervous depression connected with mental excitement; (7) deficient kidney-action, especially in old persons; (8) organic disease of the heart in the aged. How is any one specific remedy, arsenic, to meet all these varied conditions?

(1.) Is the disease hereditary? Then a very carefully arranged plan of treatment, dietetic, hygienic, and medicinal, is needed; for here we have eczema with a profound hold on the system.

(2.) The strumous habit must be combated wherever it

is met with; and, happily, our success is certain if we persevere with cod-liver oil, steel wine, and the like. I will only add here, that wherever we find an eczema in old people in which the pus-formation is altogether out of relation to the degree of local inflammatory action, we should be careful to seek for a history of struma; and even in the oldest persons anti-strumous remedies greatly aid in the cure of the disease—at least I find it so. Senile struma is an important state to recognise.

(3.) Simple debilty is very frequently all that can be detected, even in those instances in which the disease is extensive and severe. It may be advisable, even under these circumstances, if there be much local heat, burning, or smarting, to commence with saline aperients, or even small doses of antimony with ammonia; but speedily we should have recourse to tonics. I know none better than the mineral acids with bark; but it is necessary, in order to get the full benefit of the former, to increase the dose—say, of the dilute nitric acid, to thirty and forty drops in the dose. At the same time, cod-liver oil is even more useful in thin and spare subjects. Rest from over-work of body and mind, change of scene, good food, and a paucity of stimulants, are also most beneficial in these cases.

(4.) Chronic dyspepsia is very frequently present as an aggravant of eczema, and it requires all the tact of the physician to remedy it. It is in these cases that alkalies occasionally do much good in connection with bismuth, small doses of strychnine, iron, ferruginous waters, or the mineral acids, as the case may be. But the patient must also be carefully dieted. In those of good position the diet must be simplified, the plainest meats be taken, and stimulants avoided.

(5.) Eczema often occurs in gouty subjects, and needs a good deal of care, for the gout is oftentimes in an undeveloped form. To use a common term, it "hangs about the patient." Now, so long as there is uric acid freely circulating throughout the system, so long will it be difficult to make a satisfactory progress with the eczema. If there

be marked gouty symptoms, with loaded urine, the ordinary treatment for gout may be used with benefit; but in the so-called "suppressed" forms of gout the value of saline aperients, guaiacum, and iodide of potassium is incontestable. I think highly of such waters as those of Friedrichshall and Marienbad in such cases, in the morning, so as to empty the gastro-intestinal canal freely. The addition of an equal volume of hot water increases their aperient action.

(6.) Nervous depression in connection with mental distress or pure excitement is common as the general condition associated with eczema. The treatment is obvious—nervine tonics. Arsenic is often beneficial in these cases; but quinine, bark, and acids, with the milder sedatives, are better. I quite agree with Dr. Fraser, that in those cases in which there is marked hyperæsthesia, or, to use more homely language, intolerable itching, strychnine does much good. I am supposing that, under all the circumstances named, at the outset, when the inflammatory symptoms run high, salines and aperients are given first of all, in connection with local remedies, to allay the inflammation. I also assume that anæmia would have its appropriate remedy.

(7.) It is very important to attend to deficient kidney-action, especially in eczema rubrum of the legs, in old or oldish persons. Some of the best results I have ever obtained have been by the use of diuretics freely given under these conditions, and I have no little faith in the employment of digitalis as one of the ingredients of the diuretic compound. An eczema rubrum will often rapidly improve when the quantity of urine passed rises to a goodly amount from a scant quantity before. The local treatment is, however, of much importance in these cases.

(8.) It has fallen to my lot to see a goodly number of cases of eczema—and general eczema too—show themselves as the first apparent evidence of a general break-up in old people; and in these cases I have generally found a dilated and hypertrophied heart—not always, it is true;

now and then dropsy has come on, or chronic bronchitis of an annoying kind. The general treatment consists in remedies calculated to prevent or remove, first of all, the effects of the heart mischief.

You will notice, then, that there are many different disorders of health which we can very definitely fix upon as influencing the course of an eczema, and these must have each their appropriate remedies, used in connection with ordinary anti-pyrexials, in the earlier stages of eczema rubrum.

Purgatives I do not think have any special curative effect in the case of eczema; they merely aid the action of other remedies by clearing out the primæ viæ, and so give the liver and kidneys a better chance of eliminating effete products.

But supposing the acute stage to be passed, and the eczema to be getting chronic and scaly, what shall we do as regards general remedies? Here arsenic is really of service in some cases, if the disease is extensive, and markedly scaly—psoriatic, so to speak; if the patient is of a nervous temperament, and there are no marks of secondary changes in the skin consequent upon eczema. In those cases where the cellular tissue is involved, and there is a disposition to induration, I think alterative doses of bichloride of mercury and bark of infinite service; and here I agree with Dr. Fraser in regard to this treatment. I have now and then seen cases of eczema rubrum in a chronic state, in which there has been a remarkable puffiness, evidently œdematous, almost amounting, in fact, to a dropsical state of the skin, and this in young subjects. Here diuretics have benefited considerably, in alternation with cod-liver oil, iron, quinine, iodide of iron, and the like.

In regard to the local treatment of eczema rubrum, the lesson we all need to learn is the avoidance of irritants. Now suppose that we have the disease affecting a large part of the body very severely, and that there is great heat and burning of the skin, what is to be done? Perfect rest must be enjoined, and the parts, if not freely discharging,

are to be kept excluded from the air in some manner or other. It is not always an easy matter to say what will soothe in any particular case. Bran infusion, or decoction of marsh-mallow or poppy-heads, to which a little clarified size has been added, are very good applications to start with as lotions night and morning. The linimentum aquæ calcis is sometimes efficacious. After bathing the parts in either of these liquids (and we should be careful not to sodden the skin), we may adopt two plans,—apply absorbent powders, which help to exclude the air, or the mildest neutral unguents. If there be any discharge, the former are best adapted, and equal parts of starch and oxide of zinc form an excellent powder for the purpose. Dr. Anderson gives a very good prescription of the kind, containing camphor in the proportion of half a drachm or so to an ounce. In the case of the poor, nothing is perhaps so convenient as ordinary whiting, made into a thinnish paste and applied with a brush. But, if powders are used, they should be removed very carefully every twelve hours, and the poppy decoction or thin gruel may be applied for the purpose. When the surface is ceasing to discharge very freely, or not weeping so much as hot, stiff, glazy, and irritable, unguents are preferable; but they will disagree if at all rancid. The best I know is the compound lead ointment of the old London Pharmacopœia: this should be perfectly fresh, and never used if it be more than three or four days old. The application must be very carefully made. It should be spread on thin strips of old linen, and these are to be adapted closely to the affected surface. The patient, if possible, should be really packed in ointment, absolutely to exclude the air. The ointment must be renewed every ten or twelve hours. The benzoated oxide of zinc ointment is also good, but I have a preference for the other. Now, if the simple treatment above described agree, it should be steadily pursued for some time, until the heat, redness, and swelling subside. It may be well to prescribe, in addition to the above remedies, if the irritation is not relieved, an alkaline and gelatine bath each night. I have

seen a great deal of harm done by the application of ointments containing mercurial compounds in the inflammatory stage of eczema, and they should be avoided. When the subacute condition is reached, the time has come for the use of lotions, in addition to the alkaline and gelatine baths. I prefer the calamine and oxide of zinc, about half an ounce or an ounce of each, with two drachms of glycerine, and from six to eight ounces of rose- or lime-water. The parts are bathed with thin gruel, and cleansed twice a day, and the lotion is applied with a piece of sponge or camel's-hair pencil very freely several times in the twenty-four hours. The compound lead ointment may likewise be used if the lotion do not seem to agree. In old people, where the skin is dry, red, and itchy, wet packing on a small scale at night, with dressings of Hebra's litharge ointment, or the benzoated oxide of zinc, to which a small quantity of carbolic acid or balsam of Peru has been added, is serviceable. In these cases the water-dressing, however, gives great relief. But there is still one more point relative to acute eczema: it is the necessity for the removal of the crusts which form, and the prevention of their re-collection. Patients are most obstinate in dealing with this matter. It is most difficult to get them to understand that the remedies are required to be brought into contact with the surface beneath the crusts. The crusts should be removed by rubbing in oil or glycerine, or by poulticing. Once off, it is best, by the use of unguents, to prevent their re-formation. Even in the case of the scalp, the skin can be kept clean and free from crusts if a little trouble is taken in smearing the ointment fairly over it. It is proper to cleanse with warm water and white of egg once a day at least. I seldom use any other remedies than those already enumerated for the acute stages. In the transition between the acute and the chronic forms of disease, where there is a little weeping, lotions of calamine and oxide of zinc are still the things to which I trust. When, however, the discharge is ceasing, if there be a relaxed and semi-livid hue from congestion of the skin,

especially if a whole leg or arm, for example, is affected, the best possible results are to be obtained by the careful application of diachylon spread on thinnish leather. Where the circulation remains languid, I sometimes use a solution of caustic in nitric ether. So much for acute eczema and its treatment by soothing remedies.

Now, the moment the discharge feature lessens, the swelling goes, and squamation approaches, the disease is regarded as chronic; and I begin a very different and an active kind of remediation. As regards general remedies, antiphlogistics, active aperients, antimonials, and alkalies give place, unless there be any special indications for their continuance, to tonics, so-called specifics, and medicines for diathetic conditions. These I have referred to. I must speak especially of the local treatment. For convenience sake, I divide the instances of chronic eczema which are to be treated into three groups:—The first, in which the disease is slight, the textural alteration more or less superficial, and the scaliness distinct, but in which there is no crusting; in fact, a slighter form of eczema squamosum. The second, in which the scaliness is very well marked, and in which there is a good deal of infiltration into the skin, with occasional weeping, and a tendency now and then to the formation of crusts. The third, in which there is considerable thickening of, and infiltration of serous or plastic matter into, the diseased surface, in which itching is marked, and the eczema assumes a papular aspect. Astringents and absorbents do for the first class of cases,—nothing else is needed; tarry compounds for the second, which approach psoriasis in aspect; and the so-called soap treatment is best adapted to cases in the third group. The use of astringents—such as weak lotions of sulphate of zinc, alum, borax, and applications like glyceral tannin—often suffice to complete the cure of chronic eczema where the affection is mild; but experience shows that mercurial preparations are equally efficacious, and custom has given them preference in these cases. I use generally the nitric

oxide of mercury ointment, or one composed of five grains of the white precipitate to the ounce, or citrine ointment diluted with five or six parts of adeps, with or without oxide of zinc, to slight scaly eczema of the scalp, the face, the legs, ears, and other parts. Occasionally a weak solution of nitrate of silver has seemed to me to do wonders. I cannot say that I like sulphur, having seen so many cases aggravated by its most injudicious use. Where the eczema approaches in aspect to psoriasis, we may have recourse to the aid of tarry preparations, with excellent results, because all that is needed is to rouse the skin by stimulation to healthy action, and tarry preparations are admirable stimulants. It is no bar to the use of tarry compounds that itching is present, but rather the reverse. I do not say that tarry preparations are not of service in other forms of eczema, but *par excellence* are they beneficial in their action in the quasi-psoriatic eczemata. But it is not always a matter of certainty to say whether tarry compounds will agree well with an eczema. To a certain extent we must be guided by experiment. This we may say, that in those instances in which there is much dry scaliness, accompanied by obstinate itching and the formation of true papules, they should be tried. I confess that I have a preference for the pyroligneous oil of juniper over all other similar preparations, and use it in the proportion of one to four drachms to the ounce of adeps. The liquor carbonis detergens and oleum fagi, however, are good. I do not find myself so firm a believer as some in the virtues of carbolic acid as a panacea for all skin affections. Tarry preparations must be applied to the real diseased surface; that is to say, we must by water-dressing or greasing, get away all scales and scabs from eczematous patches before using the remedy. Now, it is acknowledged on all hands, as indicated before, that tarry compounds disagree with many cases in which *à priori* they would be thought to agree. I have seen eczema often aggravated, and even tar acne induced. I have said they are most efficacious

in the papular aspect of eczema: by that, I mean the truly papular aspect of eczema. In my second lecture, you will recollect I stated that dermatologists had not made proper distinction between the true papules of eczema and erected and congested follicles; and this brings me to notice one point upon which I lay great stress in the treatment of eczema. Whenever there is a papulation around an eczema which has been much inflamed, we should suppose at once that the follicles are irritated and congested. A careful examination will very soon tell if this supposition be true. If so, we conclude that there is considerable perversion of the innervation of the integuments; that the skin is very irritable, in fact, and that any stimulant treatment is sure to do harm; that, notwithstanding the eczema-patch itself is dry and scaly, the treatment must differ essentially from that adopted in similar cases, because of the indication afforded by the follicular congestion. In these cases the strapping with diachylon acts admirably. I believe that it is from the circumstance that tarry compounds have been used without distinction as to the diverse nature of the cases which make up papular eczema, that uncertainty exists as to their action. If we recognise the difference between true papular ezema and the condition induced by follicular congestion, we shall be much more cautious in our use of tar for the future. We must be specially careful in our use of tar in cases of eczema rubrum, and should abandon it if it increase rather than allay the itching, if it augment or induce any discharge, or lead to swelling or redness of the skin.

In the case of eczema affecting the fingers and toes, where there is no little pain and heat, with fissuring, it is a good plan to soften up the parts with some simple ointment—the benzoated oxide of zinc,—and then to dress the parts carefully with diachylon plaster cut up into strips and adapted to the surface. If the cracks are very severe, the application of nitric acid will be decidedly beneficial. Where there is much thickening,

the soap treatment, to be described directly, should be had recourse to.

Thus far I have spoken of simplest chronic eczemas in their scaly stage, and of those instances of chronic eczema arising out of eczema rubrum, especially in which there is slight infiltration, and therefore some thickening, and also squamation; but there is yet the treatment of the third form of chronic eczema to notice. The cases to which I now refer are all those in which, as I have said before, the results of chronic inflammation replace, as it were, the eczema. As a consequence of the antecedent inflammation we have infiltration of plastic or serous material into the tissues of the affected part, with induration, hypertrophy of the cellular tissue, warty papillary growths and the like, culminating in false elephantiasis (Arabum), or more properly bucnemia. In the less severe cases, blistering and the soap treatment are the two chief means of cure; and I particularly wish to urge practitioners to use the latter more frequently in such cases, and those to which I now refer. Some dermatologists use potassa fusa, iodide of mercury, or iodine, to cases of chronic eczema with much thickening. But I do not recommend these; and we must remember that we may lose our patient very readily if we use too violent measures. I do not, for this reason, very much like blistering. Mr. Gay tells me, however, that in his hands it has proved most beneficial; and he is not singular, I am aware, in this experience.

As I have said before, the soap treatment is the one I prefer in the general run of cases. Hebra has done essential service to therapeutics in bringing this mode of cure so prominently before the notice of the profession. The way to use the soap is as follows: take a small portion of soft soap, and rub it freely into the thickened patch by the aid of a piece of flannel, wetting the latter from time to time, as Hebra says, to make it lather. When distinct soreness is felt, the inunction should be stopped, and the part wiped fairly dry. The part is then to be very carefully covered with some mild ointment spread on linen, and

in such a way that air is entirely excluded. The best is the litharge ointment of Hebra. The application of soap and unguent should be made twice a day. After a day or so the patch softens up, but exhibits small red points, which may vesiculate : the treatment is to be continued until these latter disappear. The practitioner will notice by the cessation of itching, and the general smoothing of the patch, that improvement is in progress. Of course this plan of treatment can only be used to really chronic eczema. We are accustomed to see thickening of eczematous patches mostly about the leg. The soap treatment, with bandaging, and the exhibition of iodide of potassium, or mercurials, internally, with diuretics if needed, do certainly work very remarkable cures, as the rule. Rest may be required, and firm strapping, in the cases of false elephantiasis.

Nothing has been said as yet relative to the management of eczema impetiginodes. Of course, in those cases where the pus-formation is accounted for by the intensity of the inflammatory action, antiphlogistics, salines, and aperients are required at the outset, with the ordinary local treatment suited to eczema rubrum. But this is not the case where the pus-formation is out of all proportion to the local inflammatory action, where it is clearly due to the existence of a well-marked pyogenic habit of body ; and this applies as well to the case of the infant as the old man. Here, a building-up instead of a pulling-down plan of treatment is called for. In true eczema impetiginodes, the diminution in the pus-formation is to be brought about by the use of general remedies—cod-liver oil, steel, good food, fresh air, and the like. I press upon the attention of the profession this point respecting the relation between the pus-formation and the degree of inflammation on the one hand, and the existence of the strumous diathesis on the other. The local treatment of impetiginous eczema is, in the early stages, that of eczema rubrum entirely ; in the latter, I never get beyond the use of the simplest astringents or weak white precipitate ointment, because all active stimulants and irritants reproduce or

increase the pus-formation. In eczema infantile, what is needed besides is attention to the diet; that it be good, and regularly given; that such things as corn-flour made up with water be at once condemned, and good milk, with Robb's biscuits, be substituted, at the rate of two pints of the former per diem in the young, if the mother is weak and cannot nurse or is unfit for nursing. If the teeth are through, good broth may be given once a day. Then the secretions, if pale and unhealthy, should be rectified; and if the child is pale, steel wine given. I do not much care for arsenic. It is fashionable, and it does good in scaly eczema. As I said before, a weak ammonio-chloride of mercury ointment is the best local application in the more chronic stages.

I have now said all I intended to say relative to the treatment, and have been content to aim at laying down the principles upon which a few remedies should be used, rather than making a long list of prescriptions. I should have needed to write a very lengthy essay had I given all details that relate to the treatment of eczema.